

Application No. 10/620,176

AMENDMENTS TO THE SPECIFICATIONIn the Specification

Please substitute the following amended paragraph(s) and/or section(s) (deleted matter is shown by strikethrough and added matter is shown by underlining):

30 VAD 2/12/07
At page 9, lines 23-20, please replace the paragraph with the following.

Forming a cladding with a lower index-of-refraction adjacent the core can reduce transmission loss of the core while preserving the single mode character of the core. The placement of a cladding with an index-of-refraction lower than the average index-of-refraction of the cladding can be accomplished with a gradient in index-of-refraction formed with photosensitive material. The placement of a lower index-of-refraction cladding adjacent a core material is described further in copending and commonly assigned U.S. Patent application 10/027,906, now U.S. Patent 6,952,504 to Bi et al., entitled "Three Dimensional Engineering of Optical Structures," incorporated herein by reference.

At page 14, line 16 to page 15, line 4, please replace the paragraph with the following.

Integrated optical circuits generally comprise a plurality of optical devices that are optically connected. In a planar optical structure, a layer of optical material can include one or more optical circuits that form corresponding optical pathways along the layer. Due to improved processing ability of light reactive deposition, multiple layer optical structures with multiple layers having independent light pathways have been described. These multiple layered optical structures are described further in copending and commonly assigned PCT application PCT/US01/45762 designating the U.S. filed on October 26, 2001, now U.S. Patent 7,039,264 to Bi et al., entitled "Multilayered Optical Structures," incorporated herein by reference. Furthermore, light reactive deposition can be adapted for full three-dimensional integration of